PCW 09 22 Coordinate transformations v18

Question 1

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = 3 \cdot f[5x+6] - 7$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 2

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = 6 \cdot (f[9(x+4)] + 8)$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 3

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = \frac{f[5x - 8]}{6} + 4$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

PCW 09 22 Coordinate transformations v18

Question 4

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = \frac{f\left[\frac{x}{9} - 8\right]}{2} - 3$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 5

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = \frac{f\left[\frac{x+3}{2}\right] - 9}{6}$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 6

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = 9 \cdot f\left[\frac{x-2}{5}\right] + 6$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.